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**WHAT CAN FOODSERVICE OPERATORS DO TO REMEDY  
UNDERNUTRITION IN HOSPITALS?  
A European Perspective from an *ad hoc* Group on Nutrition Programs in  
Hospitals, Council of Europe**

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## ABSTRACT

*Undernutrition is a serious problem in hospitals. Therefore the Council of Europe in 1999 decided to establish an ad hoc group consisting of national experts to look further into the problem. Since then the group has studied the current practices in Europe regarding hospital foodservice and has issued guidelines to improve the nutritional care and foodservice practices.*

*The result of the study points at a number of major problems related to the different staff groups, the patients and the management. Among the staff groups involved in foodservice and nutritional care there seems to be a lack of clearly defined responsibilities, and a lack of educational possibilities, as well as a lack of cooperation between those groups. Foodservice and nutritional care does not pay sufficient attention to the rights of the patients and their needs for information, and, finally, hospital management seems unaware of the key role of both foodservice and nutritional care.*

*Different staff groups must combine efforts in order to make foodservice become successful nutrition. Among these groups, the foodservice staff is a key player, though ward staff, physicians, dietitians, nurses and hospital orderlies also are relevant. It is the responsibility of the hospital management to make these groups work together, however, without the support of skilled experts and professionals in the hospital environment very little will be done. This paper takes a closer look at foodservice and nutritional care from the foodservice operator's point of view, as well as the of the recommendations from the ad hoc group and the implications for foodservice operators*

## INTRODUCTION

Undernutrition is a serious problem for patients using hospital foodservice systems. It has been found that between 20 and 30% of patients are undernourished (Schauder *et al.* 2002; Mowé *et al.* 1994; Sjøberg *et al.* 1992; Mühlethaler 1995; McWhirter *et al.* 1994). Undernutrition in combination with disease prolongs the length of a hospital stay, increases the need for nursing care and sometimes intensive care, increases the risk of serious complications and can eventually lead to death (Silk 1994; Green 1999; Thomas *et al.* 2002).

The Council of Europe in 1999 decided to launch a project on *Nutrition programs in hospitals*. The purpose of the project was to review the current practices in Europe regarding hospital foodservice and nutritional care, to highlight deficiencies, and to issue guidelines to improve nutritional care and foodservice. The guidelines should address the policy level, as well as the management and operational level. It should also identify those responsible for taking action in order

to improve conditions, including the foodservice staff. A group of experts from 12 of the member states of the Council's Partial Agreement in the Social and Public Health Field was established and headed by Denmark. The group of experts has now prepared a report on their findings (Council of Europe, 2002).

## **PURPOSE**

The purpose of this paper is to point out implications of the report and to suggest guidelines for foodservice operators.

## **METHODS**

In order to evaluate the practices related to foodservice and nutritional care in Europe, a questionnaire was sent to national representatives of countries represented at the Council of Europe.

The questionnaire included questions concerning national studies of undernutrition in hospitals, the size of the hospital sector, and organizational dimensions of the hospitals. Included were also questions regarding practices in relation to nutritional care and support, education and nutritional knowledge of staff groups, foodservice practices and foodservice costs. Finally, topics such as national guidelines or recommendations regarding hospital foodservice and nutritional care, as well as new and significant projects concerning foodservice and nutritional care were covered (Beck *et al.* 2001). Data conveyed herein relies on all the answers of the representatives of the participating countries: Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Portugal, Slovenia, Sweden, Switzerland, and the United Kingdom.

## **PROBLEMS**

Five major issues are common and seem to be the major barriers for proper nutritional care in hospitals. The specific problems related to foodservice practices are reviewed below.

### **Lack of Clearly Defined Responsibilities in Planning and Managing Nutritional Care**

Denmark, Sweden, Norway and Finland have official recommendations regarding the responsibilities, duties and tasks of different ward and foodservice staff with respect to clinical nutrition and foodservice. The recommendations in

these four countries are very similar to the “nonofficial” guidelines in the other European countries regarding the responsibilities of the foodservice personnel, *i.e.*, to produce and deliver hospital food, and to secure the nutritional value and the palatability of the food. Besides, few countries mention the existence of a communication link and interaction between the kitchen and the ward. Hence, in many cases the foodservice is regarded as an issue that can be addressed separately, and as a simple task that almost any foodservice operator could handle. It is unclear who has the responsibility of informing the patients about the type of foodservice offered, the responsibility for receiving feed-back from patients about food, and the responsibility of maintaining the dialogue between the foodservice unit and the ward personnel.

### **Lack of Sufficient Educational Level with Regard to Nutrition Among All Staff Groups**

Nutrition is not taught in all courses and what is taught may be insufficient. Also, there is an educational lack with regard to management. Very few countries have a formal education for administrative dietitians, which is targeted at hospital foodservice management. Often cooks are in charge of the production with an educational background that emphasizes “healthy eating” (*i.e.*, cutting down on fat and sugar), often not appropriate for undernourished or at risk patients with poor appetites who may require energy-dense food (Davis and Bristow 1999).

Hence, foodservice staff may not be aware of the importance of providing highly nutritious and customized food to patients. There is a lack of a powerful voice for foodservice systems, unlike clinical services, when it comes to financial control and the allocation of budgets.

### **Lack of Influence and Knowledge of the Patients**

European hospitals seem to have an image problem when it comes to the quality of the food served. Before even tasting it patients expect poor quality (Holmes 1999), and after tasting it their expectation is often confirmed. As one study stated: *“Both patients and relatives were concerned about the nonavailability and poor quality of food and drink”* (Spalding 1999). Many patients consider a hospital stay and the period after, as a way to lose a few pounds. The serving of unsavoury general hospital menus with a questionable nutrient content, *e.g.*, low fat, may support this fallacy. Very few patients are aware of the fact that a weight loss in relation to disease will increase their risk of complications (Green 1999; Thomas *et al.* 2002).

Patients in general lack influence on the foodservice and the choice options. If they have an option, assistance with menu choice is imperative to prevent patients from choosing foods, which are inadvisable with respect to their clinical condition

(McGlone *et al.* 1995). Furthermore, there is seldom a good description of the offered menus. One study found that 82% of the patients receiving a texture-modified menu never had had access to a menu-plan (Berlin *et al.* 1991). Finally, whenever a choice is available, a menu often has to be ordered a day in advance, and a change in the medical condition of the patient may make foods chosen 24 h before unsuitable (McGlone *et al.* 1995).

Yet another barrier could be the attitude of the patients, highlighted in a Swedish study of geriatric patients, who did not want to participate in the decision-making regarding their own menu; rather it was up to those, who worked in the kitchen to decide (Sidenvall *et al.* 1994).

People of different ethnical and/or cultural backgrounds are especially vulnerable. The information given may not be understood, and also particular methods of food preparation and eating practices may be extremely important (Holmes 1999; McGlone *et al.* 1995).

### **Lack of Cooperation Between Different Staff Groups**

According to the official recommendations from Denmark, Sweden, Norway and Finland the communication between different staff categories should be managed by means of a contact person from either the kitchen or the ward. In practice, however, this seldom works. In a survey of the hospitals in the Nordic region the specific requirements for communication were outlined based on meal ordering, time frame, information, flexibility and cooperation (Nordic Council of Ministers 1995). Only eight of the 42 hospitals that participated were judged to have a "high level of communication." One characteristic of these hospitals was that the foodservice and ward personnel had cooperated in the design of meal order forms. Other characteristics were a varied food delivery system, menu choices, and existence of contact persons and nutrition steering committees. In a majority of the hospitals (64%) the communication level was found to be low.

There were even some discrepancies between the ward and foodservice staff answers. As an example, the management of 12 hospital foodservices stated that the patients had a choice of menu, however, the ward staff knew that in only five of the hospitals. One of the explanations to the poor communication is the different terminology used by different staff groups.

### **Lack of Involvement from the Hospital Managers**

Managers do not generally consider foodservice to play a particularly important role in the quality of health care provided by the hospital. Food provision is seen simply as a "hotel" service or a service that can be bought from any facility management provider rather than as an important therapeutic aspect for the patients (JCAHCO 1996). Consequently, foodservice departments are usually grouped with

general facilities rather than as a part of patient treatment services (Davis and Bristow 1999).

The general trend is that hospital foodservice is increasingly managed through contracts. This means that the hospital managers negotiate a contract with a foodservice operator. All significant terms and conditions in relation to foodservice should be described in the contract. Accordingly, the process of establishing the contracts and tenders becomes an extremely important tool when trying to improve hospital nutrition. Outsourcing of foodservice may also create difficulties in making foodservice part of the clinical delivery. Hence, high quality meals are not only a question of skilled foodservice operators. It also requires very competent purchasers of foodservice at the hospital management level. If the management is unable to describe what the foodservice should include, in precise and well-defined terms, the performance of the out-source service will most likely be poor.

### **SUGGESTIONS FOR SOLUTIONS**

For the recommendations from the group of experts to be carried out in practice the key players, namely the foodservice department, the ward and the management have to act concordantly. The following part discusses what the foodservice management and staff should do.

#### **Lack of Clearly Defined Responsibilities in Planning and Managing Nutritional Care**

The foodservice department is one of many important players involved in foodservice and nutritional care as illustrated in Fig. 1.

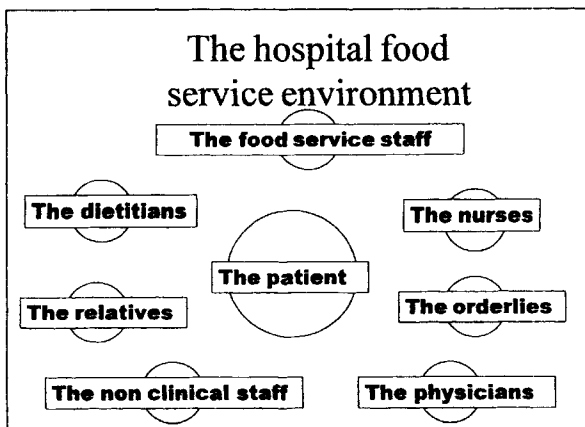


FIG. 1. THE FIGURE ILLUSTRATES THE MANY PLAYERS INVOLVED IN FOODSERVICE AND NUTRITIONAL CARE

An important task of the Nutritional Support Teams (NSTs) or the Nutrition Steering Committees (NSCs) together with foodservice personnel could be to secure that the hospital purchasing authorities include contract specifications for hospital foodservice and nutritional support. Another could be to ensure that the standards for these two items, agreed by the authorities are adhered to (Silk 1994). A foodservice contract can be structured into themes related to: (as illustrated in Fig. 2).

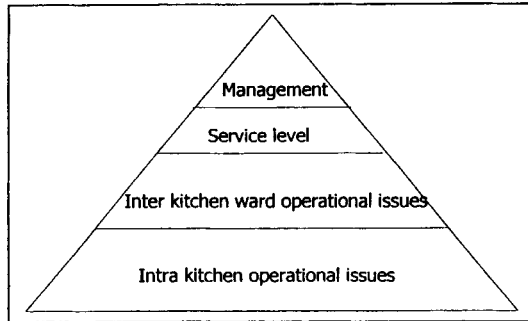


FIG. 2. THE FIGURE ILLUSTRATES A WAY TO STRUCTURE THE FOODSERVICE AND NUTRITIONAL CARE CONTRACT

- (1) *Management* including the overall service, and overall conditions for the interface between ward and foodservice department. This part also relates to finances, laws and regulations, including the price of the service, and extra services, payment conditions, and what to do in case of disagreements or malfunction of the foodservice.
- (2) The *service level* in the patient-staff interface. This part should include specifications on the quantity and type of meals, frequencies of meals, mealtimes, conditions for extra meals and number of menu options. Special effort is required to guarantee easy ordering routines, convenient meal hours, co-dining options, friendly dining environments and easy access to information about foodservice.
- (3) The *inter-kitchen-ward* operational tasks, describing how the cooperation is established and maintained, *e.g.*, the appointment of a contact person, characterization of routines and responsibilities related to the delivery of meals at the wards, how feedback from wards to the kitchen are set up, and participation in Nutrition Steering Committees and Nutritional Support Teams (Howard 2001).
- (4) *Intra-kitchen* operational tasks, describing how the production facilities and quality assurance systems are operated, and how the maintenance of



systems that manage hygiene and cleaning, working environments, environmental issues, human resources, the organization of the production facility and procurement routines are dealt with.

### **Lack of Sufficient Educational Level with Regard to Nutrition Among All Staff Groups**

Management of modern foodservice systems in health care, taking into account the importance of nutrition in treatment, as well as the increasing complexity of foodservice systems, requires high level managerial skills.

In order to improve conditions it is necessary that the foodservice operator becomes visible in the hospital environment. One important tool is information about foodservice to patients and ward staff, as well as participation in NSCs. Therefore, information and communication skills will become relevant.

Another type of qualification relates to the need for developing and maintaining quality management systems in foodservice. In the future, foodservice operations will be operated more and more according to well-defined specifications, and to meet those specifications a quality management system (QMS) must be in place. Many hospital managers will look for certified foodservice operators, standards for foodservice and nutritional care will develop and foodservice operations will be audited against those standards.

Also, the use of contracts to manage foodservice and nutritional care will increase in the coming years. In-house operators, as well as contract foodservice operators, will be expected to be able to run these services according to a contract. This requires new qualifications and understanding of the special requirements for food in hospital systems. Foodservice operators must be able to develop contracts that serve the need for a managerial and operational tool and at the same time support flexible and user-friendly foodservice.

### **Lack of Influence and Knowledge of the Patients**

In order to meet the different needs and wishes from patients it is important that the selection of menus includes menus targeted to these needs and wishes. This could, for example, be a menu for patients with different cultural and religious background, menus for vegetarians and menus for children. The labeling of meal options should be sufficiently descriptive so that ward staff and patients are able to choose. Also the menu options should include different portion sizes. Ordering routines must be developed with the patients' needs in mind. Newly admitted patients and patients missing the normal eating hours must have real choice and the possibility of being served also at odd hours. Modern information technology could be one of the means to improve conditions and to increase the flexibility of ordering routines.

Finally, food consumption can be improved without a change of menu, if patients are involved in planning their meals, have some control over food selection and feel responsible for following given advice (Holmes 1999).

### **Lack of Cooperation Between Different Staff Groups**

The term “food chain” has been adapted to emphasize that all stages in the provision of food must be adequate from nutritional risk screening and menu design to distribution and serving, Fig. 3. A failure at any point negates the system (Allison and Stanga 2000).

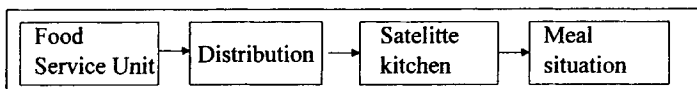


FIG. 3. THE FOODSERVICE CHAIN

Foodservice practice includes all the routines and practices that are related to the provision of food and meals to the patient, as well as the conditions under which food is served.

The foodservice operator has an important role in maintaining a dialogue with the health care staff at the ward. Supporting and participating in the work of the NSCs and the NSTs (Howard 2001) can contribute to this cooperation. In addition, the foodservice operator can take responsibility and improve cooperation through appointment of a food and nutrition champion responsible for the feedback from ward to foodservice unit. The feedback should also include routine measurement of patient satisfaction with menus and meal service.

Informing about menu energy and protein content and thereby aiding the ward staff in the observation of the patients' food intake is another way to improve the cooperation. This requires that the foodservice department have procedures for routine nutrient calculation of menus, as well as for communicating the results to ward and patients.

Other examples of conditions where the foodservice operator can play an important role are in monitoring the amount and type of food returned from the ward as well as plate waste. This is an important input when it comes to monitoring the food intake of patients and developing of menus designed for specific patient categories.

### **Lack of Involvement from the Hospital Managers**

The provision of meals in hospital foodservice systems should be seen as a

management issue. Hospital foodservice is a complex process where food becomes meals and where meals become nutrition, and where many different actors are involved. Therefore, management must give priority to create the organizational framework in which foodservice and nutritional issues can be discussed.

The fact that hygiene already is an important management issue can be used to place foodservice related and nutritional care issues on the management agenda. In order for activities in relation to nutritional issues to become implemented in the hospital organization, management must be involved. The management should begin by discussing what the goals for the foodservice and nutritional care should be. An adopted food policy will make it much easier to make operational decisions at a later stage, for example, if the management wants to outsource the foodservice. The food policy should be developed in close cooperation with the foodservice operator.

## CONCLUSION

The meal is a complex cultural and social phenomenon. For a patient a successful meal includes eating in the proper environment, having choices, friendly staff, good and sound information about meal options, and the possibility to eat with relatives or other patients.

Foodservice operators will play a key role in developing foodservice concepts that address the current problems of hospital food. Operators must approach the challenge in a holistic way, for example by looking at how the different steps in the foodservice chain and the education can be improved. Foodservice operators must look beyond the kitchen door and towards the hospital wards in order to improve the cooperation between ward and kitchen personnel.

Foodservice must choose the technology and logistics that best meet the patients' needs and are at the same time economically sustainable. Future hospital managers will expect foodservice operators not only to be able to deliver ready meals, but also to be a service provider that can deliver full service including dietetic services, serving assistance and patient service.

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